

--9. The lubricant for die lubrication according to claim 8, wherein 90% or more of particles forming the lubricant for die lubrication have a particle diameter of about 50 $\mu$ m or less.--

--10. A lubricant for die lubrication, comprising:  
a mixed powder of at least two different lubricants, each having a melting point higher than about 45°C--.

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--11. A lubricant for die lubrication, comprising:  
a mixed powder of at least two different lubricants, each having a melting point higher than about 70°C.--

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--12. A lubricant for die lubrication, comprising:  
a mixed powder of at least two different lubricants, each having a melting point higher than about 80°C.--

--13. A lubricant for die lubrication, comprising:  
a mixed powder of at least two different lubricants, each having a melting point higher than about 130°C.--

--14. The lubricant for die lubrication according to claim 8, wherein the at least two different lubricants each having a melting point higher than a predetermined temperature are at least two materials selected from the following groups:

group A: metallic soaps;

group B: polyethylenes;

group C: amide-based waxes;

group D: polyamides;

group E: polypropylenes;

group F: polymers comprised of acrylic acid esters;

group G: polymers comprised of methacrylic acid esters;

group H: plastics including fluorine; and

group I: lubricants having layered crystal structures.--

--15. The lubricant for die lubrication according to claim 10, wherein the at least two different lubricants each having a melting point higher than a predetermined temperature are at least two materials selected from the following groups:

group A: metallic soaps;

group B: polyethylenes;

group C: amide-based waxes;

group D: polyamides;

group E: polypropylenes;

group F: polymers comprised of acrylic acid esters;

group G: polymers comprised of methacrylic acid esters;

group H: plastics including fluorine; and

group I: lubricants having layered crystal structures.--

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--16. A die wherein a lubricant is adhered to the surface of the die by electrification, the lubricant comprising a mixed powder of at least two different lubricants each having a melting point higher than a predetermined temperature of a compaction pressure applied to the die.--

--17. The die according to claim 16, wherein the at least two different lubricants each having a melting point higher than the predetermined temperature of the compaction pressure are at least two materials selected from the following groups:

group A: metallic soaps;

group B: polyethylenes;

group C: amide-based waxes;

group D: polyamides;

group E: polypropylenes;

group F: polymers comprised of acrylic acid esters;

group G: polymers comprised of methacrylic acid esters;

group H: plastics including fluorine; and

group I: lubricants having layered crystal structures.--

--18. The die according to claim 17, wherein the die is a preheated die.--

--19. The die according to claim 16, wherein the die is a preheated die. --

--20. The die according to claim 16, wherein about 90% of particles forming the at least two different lubricants have a particle diameter of about 50  $\mu\text{m}$  or less.--

C1 --21. The method of manufacturing a higher density iron-based powder compact according to claim 5, wherein about 90% of particles forming the at least two different lubricants have a particle diameter of about 50  $\mu\text{m}$  or less.

--22. A method of lubricating a die, comprising:  
providing a die having a molding surface;  
providing a lubricant comprising a mixed powder of at least two different lubricants; and

adhering the lubricant to the molding surface by electrification.--

--23. The method of lubricating a die according to claim 22, wherein the at least two different lubricants each having a melting point higher than a predetermined temperature of the pressure molding are at least two materials selected from the following groups:

group A: metallic soaps;

group B: polyethylenes;

group C: amide-based waxes;

group D: polyamides;

group E: polypropylenes;

group F: polymers comprised of acrylic acid esters;

group G: polymers comprised of methacrylic acid esters;

group H: plastics including fluorine; and

group I: lubricants having layered crystal structures.--

--24. The method of lubricating a die according to claim 22, comprising preheating the die before placing an insert in the die.--

--25. A lubricant for die lubrication, comprising:

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13 } a mixed powder of at least two different lubricants, each having a melting point higher than about 150°C.--

--26. A lubricant for die lubrication, comprising:

C1 a mixed powder of at least two different lubricants, each having a melting point higher than 200°C.--

--27. The lubricant for die lubrication according to claim 11, wherein the at least two different lubricants each having a melting point higher than a predetermined temperature are at least two materials selected from the following groups:

group A: metallic soaps;

group B: polyethylenes;

group C: amide-based waxes;

group D: polyamides;

group E: polypropylenes;

group F: polymers comprised of acrylic acid esters;

group G: polymers comprised of methacrylic acid esters;

group H: plastics including fluorine; and

group I: lubricants having layered crystal structures.--

--28. The lubricant for die lubrication according to claim 12, wherein the at least two different lubricants each having a melting point higher than a predetermined temperature are at least two materials selected from the following groups:

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- group A: metallic soaps;
  - group B: polyethylenes;
  - group C: amide-based waxes;
  - group D: polyamides;
  - group E: polypropylenes;
  - group F: polymers comprised of acrylic acid esters;
  - group G: polymers comprised of methacrylic acid esters;
  - group H: plastics including fluorine; and
  - group I: lubricants having layered crystal structures.--

--29. The lubricant for die lubrication according to claim 13, wherein the at least two different lubricants each having a melting point higher than a predetermined temperature are at least two materials selected from the following groups:

- group A: metallic soaps;
- group B: polyethylenes;
- group C: amide-based waxes;
- group D: polyamides;
- group E: polypropylenes;
- group F: polymers comprised of acrylic acid esters;
- group G: polymers comprised of methacrylic acid esters;
- group H: plastics including fluorine; and
- group I: lubricants having layered crystal structures.--

--30. The lubricant for die lubrication according to claim 25, wherein the at least two different lubricants each having a melting point higher than a predetermined temperature are at least two materials selected from the following groups:

- group A: metallic soaps;
- group B: polyethylenes;
- group C: amide-based waxes;
- group D: polyamides;
- group E: polypropylenes;
- group F: polymers comprised of acrylic acid esters;
- group G: polymers comprised of methacrylic acid esters;
- group H: plastics including fluorine; and
- group I: lubricants having layered crystal structures.--

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--31. The lubricant for die lubrication according to claim 26, wherein the at least two different lubricants each having a melting point higher than a predetermined temperature are at least two materials selected from the following groups:

- group A: metallic soaps;
- group B: polyethylenes;
- group C: amide-based waxes;
- group D: polyamides;
- group E: polypropylenes;
- group F: polymers comprised of acrylic acid esters;
- group G: polymers comprised of methacrylic acid esters;
- group H: plastics including fluorine; and
- group I: lubricants having layered crystal structures.--